

IN THE CLAIMS

Please amend the claims as follows:

1. (original) A decoder circuit for a communication bus, the decoder circuit receiving a plurality of data signals from the communication bus, the data signals being susceptible of being received at different times, wherein the decoder circuit comprises:
 - a correction circuit for correcting one or more of the input signals;
 - a control signal for controlling the correction circuit;
 - a gating circuit, the gating circuit arranged in the path of the control signal; and
 - a gating control signal for controlling the gating circuit such that the control signal for controlling the correction circuit is blocked until a predetermined time.
2. (original) A decoder circuit as claimed in claim 1, further comprising a parity circuit for generating a parity signal using the input data signals, the parity signal being used to generate said control signal for controlling the correction circuit.
3. (original) A decoder circuit as claimed in claim 2, wherein the correction circuit comprises a plurality of multiplexers, each

multiplexer receiving an input data signal, and a copy of the input data signal, from the communication bus;

- a comparison circuit for comparing the parity signal generated by the parity circuit with a parity signal received from the communication bus, the comparison circuit providing the control signal for controlling the plurality of multiplexers to output either the input data signal or the copy of the input data signal.

4. (original) A decoder circuit as claimed in claim 3, wherein the gating circuit is located in the path of the control circuit such that it receives the output of the comparison circuit, and provides the control signal for controlling the plurality of multiplexers.

5. (currently amended) A decoder circuit as claimed in claim 2 ~~or~~ 3, further comprising a gating circuit provided in the path of each input data signal and each copy of the input data signal, and wherein the plurality of gating circuits are controlled by the gating control signal.

6. (currently amended) A decoder circuit as claimed in ~~any one of~~ ~~claims 3 to 5~~ claim 3, further comprising a gating circuit provided

in the output path of each multiplexer, and wherein the plurality of gating circuits are controlled by the gating control signal.

7. (currently amended) A decoder as claimed in ~~any one of claims 2 to 6~~claim 2, wherein the decoder is a dual-rail decoder.

8. (original) A decoder circuit as claimed in claim 1, further comprising:

- a plurality of parity circuits, the parity circuits generating a plurality of parity signals from the input data signals;

means for generating a plurality of control signals using the parity signals, the control signals being used to control the correction circuit;

wherein a gating circuit is provided in the path between each parity signal and the means for generating the plurality of control signals.

9. (original) A decoder circuit as claimed in claim 8, wherein the correction circuit comprises a plurality of XOR gates, each XOR gate receiving an input data signal from the communication bus, and a control signal from the means for generating control signals.

10. (original) A decoder circuit as claimed in claim 9, wherein the means for generating control signals is a syndrome decoder.

11. (currently amended) A decoder circuit as claimed in ~~any one of claims 8 to 10~~claim 8, wherein the decoder is a hamming decoder.

12. (currently amended) A decoder circuit as claimed in ~~any one of the preceding claims~~claim 1, wherein the gating control signal is arranged to block the or each control signal from passing to the correction circuit until one or more of the input data signals have become stable.

13. (currently amended) A decoder circuit as claimed in ~~any one claims 1 to 11~~claim 1, wherein the gating control signal is arranged to block the or each control signal from passing to the correction circuit until all of the input data signals have become stable.

14. (currently amended) A decoder circuit as claimed in ~~any of one the preceding claims~~claim 1, wherein the gating control signal is a delayed version of a system clock signal.

15. (currently amended) A decoder circuit as claimed in ~~any of~~
~~claims 1 to 13~~claim 1, wherein the gating control signal is
generated from the input data and/or parity bits.

16. (currently amended) A decoder circuit as claimed in ~~any one~~
~~of the preceding claims~~claim 1, wherein the gating circuit is an
AND gate.

17. (currently amended) A decoder circuit as claimed in ~~any one~~
~~of claims 1 to 15~~claim 1, wherein the gating circuit is a latch.

18. (original) A method of reducing power consumption in a
decoder circuit for a communication bus, the decoder circuit
receiving a plurality of data signals from the communication bus,
the data signals being susceptible of being received at different
times, wherein the decoder circuit comprises a correction circuit
for correcting one or more of the input signals and a control
signal for controlling the correction circuit,
wherein the method comprises the steps of providing a gating
circuit in the path of the control signal, and controlling the
gating circuit with a gating control signal, such that the control
signal for controlling the correction circuit is blocked until a
predetermined time.

19. (original) A method as claimed in claim 18, wherein a parity circuit is provided for generating a parity signal using the input data signals, the parity signal being used to generate said control signal for controlling the correction circuit.

20. (original) A method as claimed in claim 19, wherein the correction circuit comprises a plurality of multiplexers, each multiplexer receiving an input data signal, and a copy of the input data signal, from the communication bus, and a comparison circuit for comparing the parity signal generated by the parity circuit with a parity signal received from the communication bus, the comparison circuit providing the control signal for controlling the plurality of multiplexers to output either the input data signal or the copy of the input data signal.

21. (original) A method as claimed in claim 20, further comprising the step of locating the gating circuit in the path of the control circuit such that it receives the output of the comparison circuit, and provides the control signal for controlling the plurality of multiplexers.

22. (currently amended) A method as claimed in claim 19 ~~or 20~~, further comprising the step of providing a gating circuit in the path of each input data signal and each copy of the input data signal, and controlling the plurality of gating circuits with the gating control signal.

23. (currently amended) A method as claimed in ~~any one of claims 20 to 22~~ claim 20, further comprising the step of providing a gating circuit in the output path of each multiplexer, and controlling the plurality of gating circuits with the gating control signal.

24. (currently amended) A method as claimed in ~~any one of claims 19 to 23~~ claim 19, wherein the decoder is a dual-rail decoder.

25. (original) A method as claimed in claim 18, further comprising the steps of:
providing a plurality of parity circuits, the parity circuits generating a plurality of parity signals from the input data signals;
providing means for generating a plurality of control signals using the parity signals, the control signals being used to control the correction circuit; and

providing a gating circuit in the path between each parity signal and the means for generating the plurality of control signals.

26. (original) A method as claimed in claim 25, wherein the correction circuit comprises a plurality of XOR gates, each XOR gate receiving an input data signal from the communication bus, and a control signal from the means for generating control signals.

27. (original) A method as claimed in claim 26, wherein the means for generating control signals is a syndrome decoder.

28. (currently amended) A method as claimed in ~~any one of claims 25 to 27~~claim 25, wherein the decoder is a hamming decoder.

29. (currently amended) A method as claimed in ~~any one of claims 18 to 28~~claim 18, wherein the gating control signal is arranged to block the or each control signal from passing to the correction circuit until one or more of the input data signals have become stable.

30. (currently amended) A method as claimed in ~~any one claims 18 to 28~~claim 18, wherein the gating control signal is arranged to

block the or each control signal from passing to the correction circuit until all of the input data signals have become stable.

31. (currently amended) A method as claimed in ~~any one of claims 18 to 30~~claim 18, wherein the gating control signal is a delayed version of a system clock signal.

32. (currently amended) A method as claimed in ~~any one of claims 18 to 30~~claim 18, wherein the gating control signal is generated from the input data and/or parity bits.

33. (currently amended) A method as claimed in ~~any one of claims 18 to 32~~claim 18, wherein the gating circuit is an AND gate.

34. (currently amended) A method as claimed in ~~any one of claims 18 to 32~~claim 18, wherein the gating circuit is a latch.